Reviewer’s report

Title: Reasons for nonuse of contraceptive methods by women with demand for contraception not satisfied: an assessment of low and middle-income countries using Demographic and Health Surveys

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Reviewer: Meaghan O'Connor

Reviewer's report:

Thank you for the opportunity to review this paper. I thoroughly enjoyed reading it and I believe it makes an important contribution to the literature on the social determinants of maternal health/mortality. I especially liked that the authors used different stratifications to look at the data; I think this helps tell a much richer, more nuanced story about how and why women use or don't use contraception and how their reasons can vary depending on so many different factors. Stratification by wealth quintile was particularly interesting as I think we tend to think about differences in global health more on a national scale, but this paper demonstrates that there's plenty of variation within, not just among, countries. I very much look forward to reading the revised version of the manuscript after the authors have had a chance to consider the reviewers' feedback.

In addition to more line-specific comments, I offer a few overall suggestions that might help with the flow and readability of the paper. First, given the importance of the content of this paper, I would suggest having an English language editor review the manuscript; I think this could help with readability as there are several places in the paper where I needed to stop and re-read a sentence to ensure I understood it as the authors intended. Additionally, some of the transition word choices are a bit awkward; for example, on line 201, I suggest replacing "considering" with "among" as "considering" is typically used a bit differently in English. I've offered a number of suggested edits that attempt to clarify, but I think a dedicated review would be really useful and would strengthen the paper.

Second, consider using shortened versions of some of the longer indicator names to help with readability, as one would do with an acronym. For example, you could use just "nonuse" as a shortened version of "nonuse of contraceptives." Or "demand not satisfied" as a shortened version of "demand for contraception was not satisfied." A long indicator name can be a bit confusing in a sentence.

Third, if the reasons for nonuse are in quotation marks, make sure that that's consistent throughout the paper; around line 204, that convention is dropped and the reasons aren't consistently written in quotation marks. I found the quotation marks helpful, so I would suggest keeping that convention.
Line-specific recommendations/considerations are below, along with a number of comments about some of the stronger parts of the paper.

134-138: Consider combining these two sentences; as they are, they sort of contradict one another (first the pregnant women are eligible for inclusion, then they're not). I also recommend bumping the sentence that starts with "The reasons" down to start a new paragraph.

Line 142: How were the reasons grouped? It would be helpful to explain this here (e.g., "The responses were grouped into eight reasons: 1) respondent opposed… etc."). Also, the use of "reason" to describe both the eight groupings and the individual response options is confusing, and makes the sentence on 142-143 challenging to understand. Finally, were the reasons grouped before or after (during) analysis? If it was during analysis, then that explanation should be moved to the analysis section/be their own paragraph.

Line 146/Table 1: More definition on what is meant by "fatalistic" is needed. Above (line 146), you write "up to God" but more description would be helpful. Also, for parallel structure with the other reasons, you may want to consider using "fatalistic outlook" as the name of the reason.

Lines 160-162: No additional description is needed after "the wealthiest 20%"; the explanation is obvious.

Lines 162-165: The wealth index description is useful, but kind of gets in the way here. Consider moving it to the discussion section in order to demonstrate why this is an important stratifier. Otherwise, remove it.

Line 166: The SII definition is a great addition. I really liked that it was included, however, I suggest moving it up to the preceding paragraph; it connects better to the information there.

Line 182: Use "and" between "Latin America and Caribbean" rather than &.

Line 183: I suggest switching this sentence around (i.e., starting with "Health concerns' was the top reason for nonuse in 22/47 countries), otherwise, it makes it seem like the countries themselves have health concerns, not the women in the countries.

Line 184: Add "countries" after "18"—it looks like it was accidentally omitted.

Line 196: Change "East Timor" to "Timor Leste" for consistency (you use Timor Leste in all other areas of the paper).

Line 209: Suggest rewriting this sentence to something like "In countries where demand for contraception was not satisfied for 30-50% of the women,..." for more clarity about which strata is being discussed. A similar rewrite for line 217 would be helpful too.

Line 214: Remove "remarkably" (since this is the results section).
Line 224: What are the two reasons that Ghana stood out? Either elaborate and describe those reasons, or remove this sentence.

Line 229: This sentence feels incomplete. If the point is that these data reveal differences in why women do not use contraception, then say that whole statement.

Line 231: Consider switching "however" out and using "indeed" instead—this way, you'll affirm, rather than contradict.

Line 234: Typo here—I think it should say "opposition BY others", not "be."

Line 225: This paragraph is very interesting… seeing the reasons broken out by the different strata of demand-satisfied is intriguing. It makes me wonder about the social and cultural norms driving the numbers.

Line 244: "still regarding place of residence" is not necessary and can be deleted.

Line 247: It looks like the "it" after "access" is there by mistake.

Lines 249-250: Replace "e" with "and" between the percentages.

Line 282: Consider replacing "thus, in theory" with something more descriptive, such as "So, although these two countries demonstrate lower numbers, the optimal prevalence for this indicator would be zero."

Line 284: Add "the literature on" before "Latin America and the Caribbean describes…"

Line 286: Does the transition process happening in LAC explain the low numbers in Colombia and Honduras? If so, that should be included here. One way to do that would be to start this paragraph with a sentence like, "The lower prevalence in Colombia in Honduras may be attributable to demographic transition processes and the availability of contraceptives." That would frame this section really nicely.

Lines 289-294: I suggest moving this up to the previous paragraph, right after mentioning the 5 African countries. You could group the insights related to the African countries, and then in the next paragraph, group the insights on the LAC countries. That would read better.

Lines 297-303: These two sentences would make an excellent overall conclusion.

Line 304: "In fact" is not necessary to the sentence.

Line 313: This is a great reminder about the importance of contextual variables!

Lines 313-315: I would remove the sentence that starts with "About contraceptive methods"; it's a fragment and doesn't add anything. On line 315, it should say "contraception" instead of "contraceptive."
Line 320: I think "contemplate" should say "meet." Also, consider moving the sentence that starts with "Added to that" to the end of the paragraph, where it will sum things up nicely with a recommendation.

Line 324: This sentence mentions "issues of development." What are those issues? This thought feels incomplete. I suggest briefly describing those issues or removing the phrase.

Lines 338-341: This is a nice conclusion regarding how different groups of women have different social pressures, and thus stratification by reason is essential to being able to provide the most relevant, helpful care/services.

Line 342: Remove "added to that"; it doesn't add to the sentence.

Lines 351-364: Another great paragraph with interesting insights.

Line 380: Suggest rewording this sentence to read, "...survey, which does not necessarily capture women who have sexual intercourse more infrequently." (assuming this change accurately describes what you're trying to say). As is, the sentence is a little confusing.

Lines 383-384: Good recommendation.

Lines 391-400: I agree with these strengths, particularly the point about stratification.

Line 406: I suggest ending this sentence at "test contextualized interventions"; everything after that isn't really making the sentence/conclusion any stronger.

Figure 1: The age groups in the "Woman's Age" graphs should say "15 to 19", "20 to 34", etc. Same with the graph on "Parity Alive Children"—this edit applies to Figures 2 and 3 also.

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